Remarks

Applicant and the undersigned would like to thank the Examiner for his efforts in the examination of this application. Reconsideration is respectfully requested.

I. Rejection of Claims 1, 2, 4-7, 10, 22-24, and 29 under 35 USC 112

The Examiner has rejected Claims 1, 2, 4-7, 10, 22-24, and 29 under 35 USC 112, first paragraph, for nonenablement.

Applicant respectfully traverses this rejection. The Specification as originally filed clearly contemplates and discloses that the cavities are permeable. The paragraph bridging pages 9 and 10 of the specification as filed. This paragraph states ". . . in practice, for a variety of reasons including the affects of bacterial permeability, dynamic loading, localised impact damage, practical imperfections in the manufacture of the structure 10 or the use of fasteners to fabricate the structure, it is often the case the skin 12 is, or in time becomes, permeable to the fluid F." Thus this part of the Specification recognizes that the cavities are permeable not just because they develop leaks over time, but because they have an inherent permeability for various reasons. If they are not permeable, then fluid F cannot enter the structure 10. This is also stated in the first sentence of the paragraphing bridging pages 9 and 10. The Specification clearly discloses that a pressure differential is created due to the flow of fluid out of the cavities because of their permeability. The claims monitor changes in the steady-state differential pressure. If there is no flow through the cavities because they are not permeable, then there is no

pressure differential and no flow of fluid. If there is no pressure differential and no fluid flow, then there cannot be any change in pressure differential to monitor.

Please also note page 11 of the Specification as originally filed, at the paragraph from lines 12-19. This part of the Specification clearly indicates that the structure being monitored has an inherent degree of permeability, and that there is a steady-state seepage of fluid through the structure. There can be no steady-state seepage if cavities are not permeable. This paragraph goes on to state that if there is a change in the permeability, there will be a corresponding increase in the rate of in flow of fluid from the source 20 into the structure 10a that will be monitored and detected by the monitoring device 26.

Therefore, it is respectfully believed that Claims 1, 2, 4-7, 10, 22-24, and 29 satisfy 35 USC 112, first paragraph.

The Examiner has also rejected Claims 22-24 under 35 USC 112, second paragraph, as lacking sufficient antecedent basis.

Claims 22-24 have been canceled, thereby obviating this rejection.

II. Rejection of Claims 1, 2, 4, 5, 7, 10, 22, 23, and 29 under 35 USC 102(b)

The Examiner has rejected Claims 1, 2, 4, 5, 7, 10, 22, 23, and 29 under 35 USC 102(b) as being anticipated by Haupt (US 4,344,320).

This rejection is respectfully traversed, and Applicant would respectfully request that the arguments presented in the Response filed on November 18, 2003, be reconsidered. The claims as amended in this previously filed Response include various features that are *not* disclosed in Haupt, these features, among others, being: placing a permeable cavity in fluid communication with the pressure source; coupling an impedance which is

sufficiently high to create a pressure differential resulting from a minuscule flow of fluid due to permeation through the permeable cavities; and allowing a pressure differential to stabilize to form a steady-state pressure differential between a pressure source and a permeable cavity.

In Haupt, the cavities are completely sealed and have no permeability. The cavities of Haupt are completely sealed except in the event of a fracture occurring in the cavities (i.e., the piping system 4). Haupt therefore does not require the generation of a steady-state pressure differential and does not monitor for a change in that pressure differential.

We would respectfully request the Examiner to point to the specific text in Haupt where the combination of features of Claim 1 may be found.

Conclusions

Applicant hereby requests a telephonic interview in this case, and the undersigned will contact the Examiner to arrange same.

Applicant respectfully submits that the above arguments and amendments place this application in a condition for allowance, and passage to issue is respectfully solicited. The Applicant and the undersigned would like to again thank the Examiner for his efforts in the examination of this application and for reconsideration of the claims as amended in light of the arguments presented.

If the further prosecution of the application can be facilitated through telephone interview between the Examiner and the undersigned, the Examiner is requested to telephone the undersigned at the Examiner's convenience.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that the foregoing is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, this 19th day of July, 2004.

Edward Bradley